

IN THE CLAIMS

1-21 (Canceled)

22. (new) A process for preparing a metal powder or a metal hydride powder an oxide of at least one of Ti, Zr, Hf, V, Nb, Ta and Cr with a reducing agent and heating mixture in an oven, optionally under an atmosphere of hydrogen until a reduction reaction starts, and leaching the reaction product; and

washing and drying the resultant product to yield the metal powder or metal hydride powder, wherein the oxide has a mean particle size of 0.5 to 20 μm , a BET specific surface area of 0.5 to 20 m^2/g and a minimum content of 94 wt.%.

23. (new) A process according to claim 22, wherein the mixture is heated to 800 to 1400°C in an oven.

24. (new) A process according to claim 22, wherein the oxide has a mean particle size of 1 to 6 μm .

25. (new) A process according to claim 22, wherein the oxide has a BET specific surface area of 1 to 12 m^2/g .

26. (new) A process according to claim 25, wherein the oxide has a BET specific surface area of 1 to 8 m^2/g .

27. (new) A process according to claim 22, wherein the oxide has a minimum content of 96 wt.%.

28. (new) A process according to claim 27, wherein the oxide has a minimum content of 99 wt.%.

29. (new) A process according to claim 22, wherein the proportion of Fe and Al impurities in the oxide are each < 0.2 wt.%, calculated as the oxides.

30. (new) A process according to claim 29, wherein the proportion of Fe and Al impurities in the oxide are each < 0.1 wt.%, calculated as the oxides.

31. (new) A process according to claim 22, wherein the proportion of Si impurities in the oxide is < 1.5 wt.%, calculated as SiO₂.

32. (new) A process according to claim 31, wherein the proportion of Si impurities in the oxide is < 0.3 wt.%, calculated as SiO₂.

33. (new) A process according to claim 22, wherein the proportion of Na impurities in the oxide is < 0.05 wt.%, calculated as Na₂O.

34. (new) A process according to claim 22, wherein the proportion of P impurities in the oxide is < 0.2 wt.%, calculated as P₂O₅.

35. (new) A process according to claim 22, wherein the loss on ignition of the oxide at 1000°C as constant weights is < 1 wt.%.

36. (new) A process according to claim 22, wherein the tamped down bulk density according to EN ISO 787-11 (previously DIN 53194) of the oxide is 800 to 1600 kg/m³.

37. (new) A process according to claim 22, wherein a proportion of up to 15 wt.% of said oxide is replaced by an additive selected from the group consisting of MgO, CaO, Y₂O₃ and CeO₂.

38. (new) A process according to claim 22, comprising reacting a reducing agent comprising an alkaline earth metal, alkali metal, or a hydride thereof with a compound to reduce the compound.

39 (new) A process according to claim 38, wherein the reducing agent comprises at least one of Mg, Ca, CaH₂ or Ba.

40. (new) A process according to claim 22, wherein the reducing agent has a minimum content of 99 wt.%.

41. (new) A process according to claim 22, wherein the reaction is performed under a protective gas.

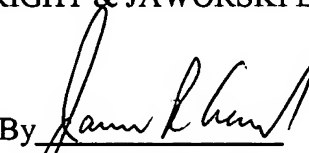
42. (new) A process according to claim 22, wherein the reaction product is leached with hydrochloric acid.

43. (new) A process according to claim 23, wherein the oxide used has a mean particle size of 1 to 6 μm .

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-0624, under Order No. NY-DNAG-313-US.

Respectfully submitted

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